IN THE CLAIMS

1-8. (Canceled).

9. (Previously Presented) A method for detecting methicillin-resistant Staphylococcus aureus (MRSA) in a sample, said method comprising the steps of:

(a) preparing a reaction mixture comprising:

a sample;

a first oligonucleotide primer comprising (i) a portion of the mecA gene of MRSA, wherein said portion is a target sequence and (ii) an RNA polymerase promoter sequence attached to the 5'-end of the sequence in (i);

a second oligonucleotide primer;

an enzyme or a mixture of enzymes having (i) RNA-dependent DNA polymerase activity, (ii) ribonuclease activity that hydrolyzes RNA of an RNA-DNA hybrid without hydrolyzing single-stranded and double-stranded RNA or DNA, (iii) DNA-dependent DNA polymerase activity, and (iv) DNA-dependent RNA polymerase activity; and

a cleaving oligonucleotide probe comprising a sequence complementary to a region overlapping with and adjacent to said target sequence of the RNA derived from the mecA gene of MRSA;

(b) incubating said reaction mixture under conditions that allow the formation of a double-stranded cDNA product from the target sequence of the RNA derived from the mecA gene of MRSA, and the transcription of an RNA product from the double-stranded cDNA product; and

(c) detecting the RNA product transcribed from the double-stranded cDNA product, wherein:

(1) an oligonucleotide comprising at least 10 contiguous bases of the sequence recited in

SEQ ID No:18 is used as the first primer, an oligonucleotide comprising at least 10 contiguous bases of the sequence recited in any of SEQ ID NoS:19, 20 or 21 is used as the second primer, and an oligonucleotide comprising the sequence recited in SEQ ID No:26 is used as the cleaving oligonucleotide probe, or

(2) an oligonucleotide comprising at least 10 contiguous bases of the sequence recited in SEQ ID No:22 is used as the first primer, an oligonucleotide comprising at least 10 contiguous bases of the sequence recited in any of SEQ ID NoS:23 or 24 is used as the second primer, and an oligonucleotide comprising the sequence recited in SEQ ID No:27 is used as the cleaving oligonucleotide probe, or

(3) an oligonucleotide comprising at least 10 contiguous bases of the sequence recited in SEQ ID No:25 is used as the first primer and an oligonucleotide comprising at least 10 contiguous bases of the sequence recited in any of SEQ ID NoS:23 or 24 is used as the second primer, and an oligonucleotide comprising the sequence recited in SEQ ID No:28 is used as the cleaving oligonucleotide probe.

10. (Previously Presented) The method of Claim 9, wherein said RNA polymerase promoter sequence comprises the nucleotide sequence recited in SEQ ID No: 30.

11. (Canceled).

12. (Previously Presented) The method of Claim 9, wherein the reaction mixture further comprises a detection probe comprising a sequence complementary to a portion of the RNA product transcribed from the double-stranded cDNA product, and wherein said detection probe is labeled with an intercalator fluorescent dye.

13. (Previously Presented) The method of Claim 12, wherein said detection probe comprises a sequence of SEQ ID NO: 20 or SEQ ID NO: 29.